

California.—Salinas City, 15th.
Illinois.—Elmira, 20th, 29th; Rockford, 29th; Swanwick, 24th.
Indiana.—Indianapolis, 24th; Wabash, 20th, 21st, 24th, 25th, 29th, 30th; Laconia, 25th, 30th.
Iowa.—Cedar Rapids, 24th; Dubuque, 24th; Humboldt, 23d; Muscatine, 29th.
Kansas.—Holton, 23d; Pretty Prairie, 6th, 7th, 19th, 25th.
Maine.—Bangor, 21st, 22d; Portland, 21st.
Minnesota.—Saint Paul, 23d.
Nebraska.—Clear Creek, 6th, 11th, 26th; Genoa, 16th, 19th, 24th.
New Jersey.—Freehold, 25th, 26th.
New Mexico.—Santa Fé, 5th, 6th, 7th, 13th to 16th, 22d, 23d, 24th, 27th, 28th.
New York.—Buffalo, 30th; Friendship, 24th; Flushing, 25th, 26th; Kiantone, 23d.
Ohio.—Bethel, 24th, Cincinnati, 24th; Columbus, 24th; Margaretta, 24th, 29th; North Lewisburg, 24th, 25th.
Pennsylvania.—Catawissa, 25th, 26th, 27th; Chambersburg, 21st, 26th; Franklin, 25th, 26th; Pittsburg, 24th; West Chester, 25th.
Rhode Island.—Narragansett Pier, 26th.
Texas.—Fort Davis, 13th, 16th.
Virginia.—Johnsontown, 4th, 25th; Marion, 25th; Norfolk, 25th.
Wisconsin.—La Crosse, 23d.

PRECIPITATION.

[Expressed in inches.]

The distribution of rainfall over the United States and Canada, as determined from observations taken at more than six hundred stations, is exhibited on chart iv.

In the first column of the following table is given the average April rainfall in the various districts for several years; in the second column is given the average for April, 1883; and the third column shows the excess or deficiency of April, 1883, as compared with the average of previous years:

Average precipitation for April, 1883.

Districts.	Average for April. Signal-Service observations.		Comparison of April, 1883, with the average for several years.
	For several years.	For 1883.	
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
New England.....	3.79	2.78	1.01 deficiency.
Middle Atlantic states.....	3.50	4.54	1.04 excess.
South Atlantic states.....	4.57	6.50	1.93 excess.
Florida peninsula.....	3.03	2.96	0.07 deficiency.
Eastern Gulf.....	5.54	8.30	2.76 excess.
Western Gulf.....	4.48	5.25	0.77 excess.
Rio Grande valley.....	1.25	1.08	0.17 deficiency.
Tennessee.....	5.74	7.12	1.38 excess.
Ohio valley.....	3.60	4.21	0.61 excess.
Lower lakes.....	2.20	2.00	0.20 deficiency.
Upper lakes.....	2.27	1.74	0.53 deficiency.
Extreme northwest.....	1.67	1.26	0.41 deficiency.
Upper Mississippi valley.....	2.96	3.50	0.54 excess.
Missouri valley.....	2.91	3.17	0.26 excess.
Northern slope.....	1.17	1.60	0.43 excess.
Middle slope.....	1.18	1.96	0.78 excess.
Southern slope.....	1.12	0.85	0.27 deficiency.
Northern plateau.....	2.46	1.17	1.29 deficiency.
Middle plateau.....	1.72	2.03	0.31 excess.
Southern plateau.....	0.40	0.16	0.24 deficiency.
North Pacific.....	3.02	7.18	4.16 excess.
Middle Pacific.....	2.22	1.38	0.84 deficiency.
South Pacific.....	0.87	0.56	0.31 deficiency.
Mount Washington, N. H.....	4.18	6.21	2.03 excess.
Pike's Peak, Colo.....	3.87	1.68	2.19 deficiency.

Over the northern part of the country from the northern plateau to New England, in Florida, California, and over the southern part of the country from Arizona to western Texas, the rainfall of the month has been below the average of April. The departures in these districts are, in general, small, being less than 1.00, except in New England and the northern plateau. In all other districts the rainfall has been above the average, the area of excess embracing a large extent of country from the Atlantic and Gulf coasts westward beyond the

Rocky mountains, and to the north Pacific coast. The heaviest rains of the month occurred in the north Pacific coast region and east Gulf states, where the departures from the average are 4.16 and 2.76, respectively. Large excesses also occurred in the south Atlantic states and Tennessee. At Olympia, Washington Territory, in the north Pacific coast region, the rainfall for the month was 7.72 above the April average of the five preceding years, while at Roseburg, Oregon, there was a slight deficiency.

The general distribution of rainfall during the month of April, since 1873, and the districts of maximum departures of each year from the April normal, are as follows:

Year.	Districts.	Maximum departures from nor- mal.	Remarks.
1873...	Illinois and Missouri..... Western Gulf.....	+ 3.06 + 3.87	Excessive over southern New England, the lower lake region, and from Indiana and southern Michigan to Iowa and southern Minnesota; deficient elsewhere east of the Rocky mountains.
1874...	Tennessee..... Western Gulf..... Eastern Gulf..... Upper lakes..... Minnesota.....	+ 8.90 + 6.90 + 5.30 + 2.20 - 1.20	Large excesses from New England southwestward to the west Gulf states, resulting in disastrous floods in the lower Mississippi river. At Vicksburg, Mississippi, over sixteen inches fell in four days. The snowfall in New England was unusually heavy. From the lower lake region westward the rainfall was below the average.
1875...	Ohio valley..... Lower lakes..... South Atlantic states..... Eastern Gulf.....	- 1.72 - 1.34 + 1.70 + 1.38	Deficient from the Ohio valley to the upper lake region and Saint Lawrence valley; excessive from the middle Atlantic to the west Gulf states, in Minnesota and the Missouri valley; normal in the upper Mississippi valley and in New England. At Fort Gibson, Indian Territory, 4.50 inches fell on the 30th.
1876...	South Atlantic states..... Eastern Gulf..... Upper Mississippi valley..... Ohio valley..... Lower lakes.....	+ 2.35 + 1.50 + 1.35 - 1.05 - 0.65	Excessive in New England, from the south Atlantic to the west Gulf states, and in the upper Mississippi and Missouri valleys; deficient in the Ohio valley, lower lake region, and from Minnesota eastward to the Saint Lawrence valley, and also in the middle Atlantic states.
1877...	South Atlantic states..... Tennessee..... Eastern Gulf..... Missouri valley..... Ohio valley..... San Francisco, California.....	+ 5.65 + 5.75 + 2.50 + 2.20 - 0.85 - 1.54	Deficient on the Pacific coast, in the lower lake region and Ohio valley; above the average in all other districts, being largely in excess in Tennessee and the south Atlantic states, where the rainfall was more than twice the normal value.
1878...	Tennessee..... South Atlantic states..... Minnesota..... Upper Missouri valley..... Middle Atlantic states..... Ohio valley.....	+ 2.80 + 2.61 + 3.89 + 2.34 + 0.39 - 0.23	Deficient in the Ohio valley, middle Atlantic states, and at Portland, Oregon; excessive in all other districts, the departures being large in Minnesota, the upper Missouri valley, in Tennessee, and in the south Atlantic states.
1879...	South Atlantic states..... Western Gulf..... Ohio valley..... Upper Mississippi valley..... Upper Missouri valley.....	+ 2.78 + 2.60 - 1.65 - 1.62 - 1.60	Excessive in New England and in the south Atlantic and Gulf states; deficient in all other districts, except normal in California.
1880...	Saint Lawrence valley..... Ohio valley..... Upper lakes..... Middle Pacific coast..... South Atlantic states..... Florida.....	+ 2.43 + 1.55 + 1.49 + 7.87 - 1.99 - 1.57	Deficient in the Missouri valley, Tennessee, and from New England to the east Gulf states; excessive in the west Gulf states, the lake region, in the upper Mississippi, Ohio, and Saint Lawrence valleys, and on the Pacific coast. On the middle Pacific coast the rainfall was about five times as great as the normal value.
1881...	Upper Mississippi valley..... New England..... Middle Atlantic states..... Western Gulf..... Middle Pacific coast..... North Pacific coast..... Florida.....	- 1.58 - 2.34 - 1.95 - 1.93 - 1.93 + 0.64 + 0.30	Deficient in all parts of the country, except slight excesses in Florida and in the north Pacific coast region.
1882...	North Pacific coast..... Extreme northwest..... Upper lakes..... Tennessee..... Western Gulf..... New England.....	+ 2.09 + 0.70 + 0.70 - 2.05 - 1.73 - 1.19	Excessive from the lower lake region westward to the Rocky mountains, in the north Pacific coast region, middle plateau, and in Florida; deficient in all other districts, except a very slight excess in the east Gulf states.

DEVIATIONS FROM AVERAGE PRECIPITATION.

The departures exhibited by the reports from the regular Signal Service stations are shown in the table of average precipitation for April, 1883. The Chief Signal Officer is indebted to the voluntary observers for the following notes upon this subject. As some of these comparisons are made with

Table of Excessive, Greatest, and Least Monthly Rainfalls.

STATION.	SPECIALLY HEAVY.			Largest Monthly.	SMALLEST MONTHLY.		
	Date.	Amt.	Duration	Amount.	STATION.	Amt.	
<i>Alabama.</i>					<i>Arizona.</i>		
Auburn.....	7	2.20		12.83	Benson.....	0.00	
Do.....	9	3.45			Casa Grande.....	0.00	
Do.....	23	4.41			Fort Bowie.....	0.00	
Birmingham.....	1	2.05		11.22	Fort Thomas.....	0.00	
Do.....	23	4.30			Maricopa.....	0.00	
Mount Vernon Barracks.....	4	3.38	11 h. 30 m.	11.18	Pantano.....	0.00	
Do.....	6, 7	3.24			San Carlos.....	0.00	
Do.....	8, 9	2.75			San Simon.....	0.00	
Opelika.....	7	2.33		10.65	Tucson.....	0.00	
Do.....	9, 10	3.08			Wilcox.....	0.00	
Do.....	23	3.86			Yuma.....	0.00	
Tuscaloosa.....	23	3.60		9.71	Fort Grant.....	0.00	
Calera.....	9, 10	2.60			Texas Hill.....	0.00	
Do.....	23	2.90			Fort Verde.....	0.12	
Selma.....	9	2.50		8.48	Fort Apache.....	0.22	
Montgomery.....	9	3.41		8.16	<i>California.</i>		
Uniontown.....	7	2.74		7.73	Indio.....	0.00	
Do.....	9	3.15			Mammoth Tank.....	0.00	
Mobile.....	9	2.59		7.25	Mojave.....	0.00	
Do.....	12	2.02			Newhall.....	0.00	
Scottsboro.....	22, 23	3.12		6.62	Raveuna.....	0.00	
Demopolis.....	9	3.20		6.20	Spadra.....	0.00	
<i>Arkansas.</i>					Anaheim.....	0.10	
Little Rock.....	5, 6	4.65		8.92	San Fernando.....	0.13	
Do.....	21, 22	2.68			Los Angeles.....	0.15	
Mount Ida.....	6	2.00		6.20	Byron.....	0.17	
<i>Delaware.</i>					Marysville.....	0.30	
Delaware Breakwater.....	22, 23	2.17			Tracy.....	0.30	
<i>Florida.</i>					San Diego.....	0.31	
Sanford.....	1, 2	4.01		8.44	Williams.....	0.38	
Do.....	23, 24	2.97			Brentwood.....	0.39	
Fort Barrancas.....	3, 4	2.00		7.48	Turlock.....	0.40	
Do.....	9, 10	3.94			Merced.....	0.41	
Pensacola.....	4	2.17		6.74	Colton.....	0.45	
Do.....	8, 9	2.00			Delano.....	0.50	
Saint Augustine.....	1	2.54	15 hours	6.63	<i>Colorado.</i>		
Fernandina.....	23	3.12			Fort Lewis.....	0.43	
Waldo.....	1	2.65			<i>Dakota.</i>		
Mayport.....	23	2.33			Fort Buford.....	0.48	
Jacksonville.....	23	2.17	2 h. 5 m.		<i>Missouri.</i>		
Punta Rasa.....	4	2.05	2 h. 15 m.		Brunswick.....	0.50	
<i>Georgia.</i>					<i>Montana.</i>		
Covington.....	9, 10	2.90		10.93	Glendive.....	0.07	
Do.....	23	6.30			Fort Missoula.....	0.15	
Thomasville.....	7	2.65		10.63	Fort Maginnis.....	0.39	
Do.....	23	3.70	1 hour		Fort Assiniboine.....	0.43	
Newman.....	23	4.60		10.45	<i>Nebraska.</i>		
Bainbridge.....	10	2.90		9.80	Plattsmouth.....	0.32	
Do.....	23	3.20			<i>Nevada.</i>		
Forsyth.....	10	3.94		9.59	Reno.....	0.00	
Do.....	23	4.00	4 h. 30 m.		Hot Springs.....	0.10	
West Point.....	9, 10	4.18		8.65	Elko.....	0.13	
Atlanta.....	9	3.08		8.20	Browns.....	0.14	
Do.....	23	2.40	1 h. 40 m.		Wadsworth.....	0.18	
Calhoun.....				7.06	Humboldt.....	0.35	
Dalton.....	23	2.51		6.73	Carson City.....	0.39	
Macon.....	9, 10	3.32		6.62	<i>New Mexico.</i>		
Albany.....				6.50	Deming.....	0.00	
Augusta.....	9, 10	2.64	2 h. 45 m.	6.29	Lordsburg.....	0.00	
Do.....	23	2.53	3 h. 40 m.		Santa Fe.....	0.11	
Griffin.....	9, 10	3.45			Fort Union.....	0.22	
Union Point.....	23	2.83			Fort Wingate.....	0.22	
Savannah.....	9, 10	2.40			<i>Texas.</i>		
Do.....	10	2.18			El Paso.....	0.10	
<i>Illinois.</i>					Fort Concho.....	0.12	
Peoria.....	5, 6	2.71		6.18	Longview.....	0.32	
Do.....	23	2.60			Brownsville.....	0.35	
<i>Indiana.</i>					<i>Utah.</i>		
Bluffton.....	6	2.00		7.53	Blue Creek.....	0.12	
Do.....	15	2.00			Ogden.....	0.47	
Vevay.....	5, 6	3.10	24 hours	6.89			
Laconia.....	5, 6	2.85	12 hours	6.80			
Jeffersonville.....	6	3.20		6.18			
Evansville.....	5, 6	2.84					
Degonia Springs.....	5, 6	2.61					
Saint Meinrad.....	5, 6	2.45					
Corydon.....	5, 6	2.12					
<i>Iowa.</i>							
Des Moines.....	21, 22	2.12					
<i>Kentucky.</i>							
Bowling Green.....	22	3.02		7.60			
Louisville.....	5, 6	3.66		6.63			
Frankfort.....	6	3.09					
<i>Louisiana.</i>							
New Orleans.....	7	8.06		14.20			
Do.....	8, 9	3.39					
Amite City.....				12.74			
Point Pleasant.....	6, 7	7.35		11.96			
Do.....	22	2.01					
Monroe.....				6.21			
<i>Maryland.</i>							
Ocean City.....	22, 23	2.20					
<i>Mississippi.</i>							
Brookhaven.....	9	2.90		11.08			
Do.....	22, 23	2.71					
State Line.....	7, 8, 9	5.73		9.95			
Starkville.....	6	2.02		7.71			
Do.....	9, 10	2.04					
Edwards.....	6	3.52		7.65			
Corinth.....	22, 23	3.40		7.07			
Vicksburg.....	6	4.25	7 h. 5 m.	6.99			
Hernando.....	21, 22	2.30					
<i>Nebraska.</i>							
Sutton.....				6.35			
Omaha.....	14	2.53	3 h. 15 m.				

Table of Excessive, Greatest, and Least Monthly Rainfalls.—Continued.

STATION.	SPECIAL HEAVY.			Largest Monthly.	SMALLEST MONTHLY.	
	Date.	Amt.	Duration	Amount.	STATION.	Amt.
<i>New Hampshire.</i>						
Mount Washington.....				6.29		
<i>New Jersey.</i>						
Cape May.....	22, 23	2.51				
Vineland.....	23	2.05				
<i>North Carolina.</i>						
Portsmouth.....	16, 17	2.75		13.16		
Do.....	23	4.00				
Murphy.....				9.75		
Highlands.....	22, 23	5.60	19 hours	9.65		
Brevard.....	22, 23	3.88		8.94		
Kittyhawk.....	23	3.04		8.78		
Lenoir.....	23	3.80		7.40		
Chapel Hill.....	22	4.19		7.35		
Weldon.....	23	3.51		6.79		
Hatteras.....	23	3.21		6.74		
Charlotte.....				6.05		
Sloop Point.....	23	3.12				
Smithville.....	23, 24	2.32				
Wilmington.....	23	2.25				
Lumberton.....	23	2.00				
<i>Ohio.</i>						
Portsmouth.....	5, 6	2.20				
<i>Oregon.</i>						
Portland.....				7.88		
Albany.....				6.58		
Eola.....				6.51		
<i>Pennsylvania.</i>						
Wellsboro.....	19	2.16				
<i>South Carolina.</i>						
Columbia.....	9, 10	2.08		6.24		
Saint Matthews.....	23	3.76		6.14		
Spartanburg.....	23	2.03				
<i>Tennessee.</i>						
Paris.....	6	3.40		10.08		
Do.....	22	4.38				
Nashville.....	5, 6	2.07		9.10		
Do.....	22	5.03				
Grand Junction.....	22	4.99		8.89		
Austin.....	6	2.00		8.60		
Do.....	22, 23	3.55				
Knoxville.....	22, 23	3.75	15 h. 40 m.	8.17		
Murfreesborough.....	22	2.20		6.58		
Chattanooga.....	22	2.38		6.55		
Ashwood.....	21, 22	2.90		6.10		
Brownsville.....	22	2.08				
<i>Virginia.</i>						
Norfolk.....	16, 17	5.19	24 hours	9.76		
Do.....	23	2.23				
Cape Henry.....	16, 17	5.01	17 h. 50 m.	9.72		
Hampton.....				8.30		
Fort Monroe.....	16, 17	2.98	21 hours	6.66		
Johnsontown.....	17	3.50	9 hours	6.65		
<i>Washington Territory.</i>						
Fort Canby.....				6.52		
<i>Wisconsin.</i>						
Embarras.....	14	2.25				
<i>West Virginia.</i>						
Helvetia.....	4, 5	2.63		6.52		

the averages determined from records covering periods extending back many years before the establishment of the Signal Service, they will be found of special interest:

Illinois.—Riley: monthly rainfall, 2.00, is 0.67 below the April average of the last twenty-two years.

Anna: monthly rainfall, 5.75, is the largest April precipitation of the last eight years.

Indiana.—Vevay: monthly rainfall, 6.89, is 3.36 above the April average the last seventeen years.

Wabash: monthly rainfall, 3.60, is 0.61 above the April average of the last seven years.

Kansas.—Lawrence: monthly rainfall, 2.12, is 0.92 below the April average of the last fifteen years. The total precipitation for the four months ending April 30th, 1883, is 6.44, or 1.31 below the average of the corresponding months of the last fifteen years.

Yates Centre: monthly rainfall, 1.30, is 0.19 above the April average of the last three years.

Wellington: monthly rainfall, 2.06, is 0.26 below the average of the last four years.

Maine.—Gardiner: monthly rainfall, 3.46, is 0.10 above the April average of a period of forty-seven years.

Maryland.—Fallston: monthly rainfall, 2.76, is 0.54 below the April average of the last twelve years.

Missouri.—Saint Louis: Professor Francis E. Nipher, Director of the "Missouri Weather Service," reports the monthly rainfall at the "central station" to be 2.62, or 1.08 below the normal. At the Saint Louis water-works, the monthly rainfall was 3.87.

New York.—North Volney: monthly rainfall, 1.60, or 0.52 below the April average of sixteen years.

Palermo: monthly rainfall, 1.16, or 1.36 below the April average of the last thirty years. The monthly snowfall, 1.75, is 0.25 below the April average of the same period. During April 1874, 18 inches of snow fell, while no snow fell during April in eleven of the thirty years record.

Ohio.—Wauseon: monthly rainfall, 1.63, or 0.91 below the April average of ten years.

Pennsylvania.—Dyberry: monthly rainfall, 2.31, is 0.12 below the April average of fourteen years. The largest April rainfall of that period, 5.07, occurred in 1874; the smallest, 0.80, occurred in 1882. The total snowfall of the winter of 1882-3 is 69 inches, or about 3 inches more than the average of the last twenty-seven years.

Texas.—New Ulm: monthly rainfall, 2.54, is 1.56 below the April average of eleven years. The largest April precipitation of that period, 8.00, occurred in 1872; the smallest, 1.08, occurred in 1875.

Vermont.—Woodstock: monthly rainfall, 1.48, is 0.99 below the April average of the last fourteen years. The largest April snowfall of the last twenty-two years, 49 inches, occurred in 1874; no snow fell during April in 1866 and 1867. The snowfall of April, 1883, is 4.75 inches, or about 3.5 below the average of twenty-two years.

Virginia.—Variety Mills: monthly rainfall, 4.29, is 1.61 above the April average of four years.

Wytheville: monthly rainfall, 4.67, or 1.10 above the April average of a period of nineteen years.

West Virginia.—Helvetia: monthly rainfall, 6.72, is 3.05 above the April average of seven years.

Washington Territory.—The following table has been forwarded by Mr. James Straight, of Walla Walla, which shows the rainfall at that place during the years from 1873 to 1882, inclusive:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual sums.	Monthly mean for each year.
1873.....	1.52	2.05	1.47	1.75	2.91	1.29	0.81	0.12	0.00	0.00	0.56	0.65	13.13	1.09
1874.....	1.52	1.98	0.59	1.89	1.10	1.12	0.00	0.54	0.05	0.41	2.09	0.55	11.84	0.99
1875.....	1.96	0.78	1.11	0.98	1.35	3.37	0.00	1.10	0.19	2.05	1.86	1.15	15.91	1.32
1876.....	0.35	0.77	0.73	2.16	1.78	0.65	0.27	0.47	0.51	4.37	4.12	1.16	17.32	1.44
1877.....	0.68	1.45	4.45	0.59	4.97	0.98	1.19	0.10	1.40	1.30	2.72	0.73	20.56	1.71
1878.....	1.23	2.24	1.53	0.16	2.17	0.09	0.67	0.08	1.29	2.08	0.79	1.31	13.64	1.14
1879.....	2.45	1.92	2.14	2.23	3.41	0.94	0.32	0.43	1.62	0.29	1.83	2.00	20.48	1.71
1880.....	1.61	0.49	1.07	2.01	1.54	0.98	0.54	1.29	0.17	1.21	1.00	4.90	17.71	1.48
1881.....	4.76	3.45	1.39	2.28	0.19	1.91	0.37	0.34	0.66	3.93	2.32	1.67	22.27	1.86
1882.....	0.78	2.27	1.30	3.22	1.57	0.78	0.67	0.10	0.99	3.20	2.10	3.89	20.87	1.74
Monthly mean for series..	1.59	1.74	1.58	1.73	2.10	1.21	0.48	0.46	0.69	1.88	1.94	1.89	17.37	1.45

HAIL.

Alabama.—Mobile: a light fall of hail is reported to have occurred a few miles from this city, between noon and 1 p. m. of the 11th. On the 12th, at Spring Hill, six miles distant, hailstones fell as large as hen's eggs; no hail fell at Mobile.

Montgomery: a heavy fall of hail was reported from points three miles from this city on the 19th.

Arkansas.—Hot Springs, 28th: a most disastrous hail-storm occurred here at noon of this date. Many buildings were badly damaged, and hundreds of windows were broken.

Arizona.—Fort Verde: a heavy hail-storm occurred at this place between 1.20 and 2.15 p. m. of the 13th.

California.—San Francisco, 19th: hail fell in several parts of the city and at points on the opposite side of the bay. Hail also fell at San Rafael during the morning of the 12th.

Illinois.—Cairo, 28th: a hail-storm is reported to have occurred sixteen miles southwest of this city at 5 p. m.

Iowa.—Dubuque: during a thunder-storm on the 14th, a few large hailstones fell at 3.55 p. m.

Keokuk, 4th: hail fell for a few minutes during a thunder-storm at 9.25 a. m. A slight fall of hail also occurred at 3.40

p. m. of the 22d; and a severe hail-storm occurred at 4.35 p. m. of the same date, the hailstones covering the ground.

Muscantine, 15th: a hail-storm occurred at 3 p. m. of this date. The hailstones were as large as walnuts, breaking windows, etc.

Louisiana.—New Orleans, 29th: Reports from Arcadia, Bienville parish, state that during the afternoon of the 28th, that place and vicinity was visited by one of the severest hail-storms ever experienced there. The storm passed to the south-east, stripping the foliage from the tree, killing some stock and doing other damage within its track, which was from four to five miles in width. The ground was covered with hailstones, some of which weighed three-fourths of a pound, measuring eleven inches in circumference and four inches in diameter.

Michigan.—East Tawas, 14th: during a heavy rain and thunder-storm, hailstones of unusual size fell, some of them measuring three inches in diameter. Several residences were struck by lightning during the storm.

Missouri.—Archie, 22d: a heavy and destructive hail-storm passed over this place during the night damaging trees and crops.

Nebraska.—Peru, 13th: during the thunder-storm at 6 p. m., hailstones fell, measuring one inch in diameter.

Omaha: a hail-storm occurred at 4.35 p. m. of the 13th, the hailstones being of moderate size.

North Carolina.—Murphy, 6th: a heavy hail-storm occurred on this date, doing much injury to vegetation. Some of the hailstones weighed more than one ounce.

Oregon.—Portland, 12th: hail fell from 12.30 to 12.33 p. m. The hailstones were small, causing no damage to fruit or grain. Light showers of hail also fell on the 12th and 13th.

Texas.—Coleman City, 12th: hailstones, weighing about half an ounce, fell at 7.05 p. m., lasting six minutes.

Fort Davis, 8th: between 12.50 and 1.25 p. m., hailstones as large as hickory-nuts fell at points south and west of that station. During the storm on the evening of the 29th, which is described under the heading "Local Storms," the hail accompanying it was unprecedented in this locality. On the surrounding hills the ground was covered with hailstones to a depth of from three to four inches, of various sizes, some being as large as walnuts. But little hail fell at this station.

The dates on which hail-storms of less severity have occurred in the various states and territories are as follows:

Alabama.—Green Springs, 11th; Auburn, 19th, 22d.

Arizona.—Prescott, 20th; Fort Apache, 6th; Fort Verde, 20th.

Arkansas.—Mount Ida, 5th, 11th, 28th; Texas Hill, 11th, 21st, 28th; Fort Smith, 11th, 13th; Little Rock, 5th, 11th, 19th.

California.—Angel Island, 12; Fort Bidwell, 21st, 27th; Oakwood, 3d; Visalia, 12th.

Colorado.—Fort Lewis, 4th; Denver, 29th.

Dakota.—Fort Randall, 21st; Fort Lincoln, 11th; Morris-ton, 23d; Wicklow, 14th, 15th; Fort Bennett, 21st.

Florida.—Pensacola, 23d.

Idaho.—Fort Lapwai, 1st, 13th.

Illinois.—Anna, 23d; Morrison, 10th; Mattoon, 29th; Polo, 10th; Cairo, 11th.

Indiana.—Logansport, 23d; Indianapolis, 28th.

Indian Territory.—Fort Reno, 21st.

Iowa.—Cresco, 4th; Fort Madison, 4th; Guttenburg, 14th; West Bend, 13th; Muscatine, 12th; Des Moines, 13th, 22d; Indianola, 4th, 14th, 22d; Humboldt, 5th, 21st, 23d; Davenport, 5th, 6th; Burlington, 4th.

Kansas.—Independence, 11th; Wellington, 14th; Elk Falls, 14th.

Kentucky.—Bowling Green, 11th, 23d.

Maryland.—Fort McHenry, 23d.

Massachusetts.—Mendon, 7th; New Bedford, 24th; Worcester, 20th; Charlestown, 7th, 25th.

Minnesota.—Fort Snelling, 10th, 22d; Northfield, 10th, 22d.

Missouri.—Corning, 13th.

Montana.—Fort Missoula, 11th, 13th.
Nebraska.—Fort Niobrara, 11th, 21st; Clear Creek, 23d;
 De Soto, 13th, 14th, 21st; Genoa, 22d, 23d; Red Willow, 20th.
Nevada.—Fort McDermitt, 11th.
New Jersey.—Somerville, 27th; Moorestown, 13th; Vine-
 land, 24th.
New York.—White Plains, 20th, 24th; Albany, 7th.
North Carolina.—Highlands, 6th, 22d; Weldon, 22d; Bre-
 vard, 6th, 22d; Wilmington, 24th.
Ohio.—North Lewisburg, 28th; Wauseon, 13th.
Oregon.—Albany, 13th; Roseburg, 11th, 13th.
Pennsylvania.—Franklin, 23d; Erie, 28th.
Tennessee.—Ashwood, 11th; Austin, 23d; Murfreesborough,
 22d.
Texas.—Fort Davis, 7th; Indianola, 28th.
Utah.—Nephi, 9th, 23d.
Virginia.—Wytheville, 1st.
Washington Territory.—Fort Canby, 10th to 13th, 23d; Col-
 fax, 4th, 8th, 9th; Spokane Falls, 11th, 13th, 22d.
Wisconsin.—Embarras, 10th; Ripon, 10th; Sussex, 10th,
 22d; Milwaukee, 10th.
Wyoming.—Fort Bridger, 27th; Fort Supply, 27th.

In the following table are shown the greatest and least num-
 bers of rainy (upon which rain fell) and cloudy days; the
 greatest and least percentages of mean relative humidity; and
 the highest and lowest dew-point means, as reported from the
 various districts, for the month of April, 1883:

Districts.	Rainy days	Cloudy days.	Rel. humidity. *	Dew-point
			Percentages.	°
New England.....	From 10 to 15	From 5 to 12	From 57.8 to 81.1	From 28.5 to 36.9
Middle Atlantic states..	" 12 " 19	" 5 " 14	" 55.8 " 81.5	" 31.0 " 46.8
South Atlantic states....	" 10 " 16	" 5 " 17	" 65.8 " 85.0	" 47.2 " 66.0
Florida peninsula.....	" 2 " 13	" 0 " 8	" 70.6 " 70.8	" 62.7 " 68.1
Eastern Gulf.....	" 13 " 18	" 6 " 11	" 68.8 " 78.8	" 54.5 " 61.2
Western Gulf.....	" 7 " 16	" 5 " 18	" 61.6 " 78.3	" 46.0 " 63.4
Rio Grande valley.....	" 3 " 8	" 0 " 9	" 50.0 " 77.7	" 49.9 " 60.0
Ohio valley and Tenn....	" 12 " 17	" 8 " 12	" 60.5 " 74.4	" 36.8 " 50.1
Lower lakes.....	" 12 " 16	" 6 " 11	" 58.3 " 72.2	" 39.1 " 34.3
Upper lakes.....	" 8 " 16	" 5 " 11	" 93.8 " 74.9	" 25.3 " 33.2
Extreme northwest.....	" 6 " 9	" 3 " 9	" 65.9 " 77.8	" 26.8 " 31.1
Upper Mississippi valley	" 11 " 15	" 7 " 12	" 55.7 " 62.4	" 30.6 " 40.0
Missouri valley.....	" 10 " 13	" 4 " 11	" 54.1 " 67.4	" 33.0 " 37.5
Northern slope.....	" 8 " 16	" 2 " 15	" 55.3 " 74.1	" 23.3 " 34.6
Middle slope.....	" 0 " 14	" 1 " 13	" 44.3 " 57.4	" 22.4 " 37.5
Southern slope.....	" 2 " 6	" 2 " 5	" 38.1 " 55.7	" 28.3 " 43.2
Southern plateau.....	" 0 " 6	" 0 " 5	" 31.4 " 44.1	" 14.2 " 30.8
Middle plateau.....	" 10 " 14	" 4 " 12	" 50.7 " 54.7	" 22.3 " 29.5
Northern plateau.....	" 8 " 18	" 3 " 14	" 58.3 " 69.0	" 25.6 " 35.1
North Pacific.....	" 19 " 20	Sixteen	" 67.5 " 74.3	" 37.6 " 40.6
Middle Pacific.....	" 8 " 17	" 1 to 5	" 58.3 " 85.3	" 39.6 " 44.4
South Pacific.....	" 1 " 7	" 0 " 5	" 47.9 " 68.4	" 43.9 " 46.2
Mt. Washington, N. H....	Twelve	Five	90.3	17.3
Pike's Peak, Col.....	Nineteen	Six	85.7	8.4

* Relative humidity corrected for altitude.

SNOW.

The dates on which snow is reported to have fallen in the
 various districts are as follows:

New England.—1st, 5th to 8th, 11th, 12th, 13th, 19th, 20th,
 22d to 30th.

Middle Atlantic states.—1st, 2d, 7th, 20th, 22d, 23d, 24th,
 29th.

Ohio valley.—1st, 2d, 7th, 12th, 23d, 24th.

Lower lakes.—1st, 2d, 6th, 7th, 8th, 22d to 25th, 28th.

Upper lakes.—3d, 4th, 6th, 7th, 9th, 10th, 11th, 13th, 15th,
 16th, 19th, 22d to 27th.

Extreme northwest.—1st to 4th, 13th, 14th, 15th, 18th, 21st,
 22d, 30th.

Upper Mississippi valley.—1st, 2d, 3d, 5th, 6th, 7th, 10th, 12th,
 22d, 23d, 24th.

Missouri valley.—1st, 2d, 3d, 5th, 6th, 9th, 10th, 14th, 22d,
 23d, 24th.

Northern slope.—1st to 5th, 8th to 14th, 16th, 17th, 21st to
 27th, 30th.

Middle slope.—4th, 5th, 7th, 13th, 14th, 21st to 24th, 26th,
 27th.

Southern plateau.—4th, 6th, 13th, 14th, 20th, 21st, 23d,
 24th.

Middle plateau.—1st to 26th, 29th, 30th

Northern plateau.—1st, 2d, 3d, 6th to 16th, 21st, 22d, 23d,
 25th, 26th, 28th.

On the summit of Pike's Peak, Colorado, snow fell on the
 4th, 5th, 6th, 9th, 11th to 14th, 18th, 20th to 23d, 27th to 30th.

Other stations reporting snow, which are not included in the
 above named districts are:

Cape Mendocino, California, 12th, 13th. Sacramento, Cali-
 fornia, 13th, 14th. Fort Klamath, Oregon, 12th.

Unusually heavy snow storms for the season, have occurred
 as follows:

Saint Paul, Minnesota, 10th.—The severest snow storm of
 the season began during the afternoon of this date. Street
 railway travel was suspended on account of snow-drifts.

Minneapolis, Minnesota, 10th.—One of the severest snow
 storms of the season occurred here on this date. Street car
 travel was suspended for the first time this winter. The roof
 of a large building fell in from the weight of snow, during the
 afternoon.

Reports from Deadwood, Dakota, state that a severe snow
 storm began at that place on the night of the 12th, blockading
 the railroads and damaging the telegraph lines.

Omaha, Nebraska, 22d.—A snow storm began during the
 early morning of the 21st, and continued all day, blockading
 all the railroad tracks in the mountain region, although the
 snow-plows were actively used. The east-bound overland
 train, due to-day, arrived nine hours late.

Atchison, Kansas, 23d.—Trains between Denver, Colorado,
 and this place, encountered snow-drifts five feet deep, and
 were delayed ten hours.

Cheyenne, Wyoming, 21st.—Snow is drifted in places to
 depths of ten feet, causing suspension of travel. Trains on the
 Union Pacific railroad did not proceed west of Cheyenne, on
 account of snow-drifts. This storm was the severest that has
 been experienced in the territories since the notable storm of
 March 7th and 8th in 1878. The telegraph wires were pros-
 trated in all directions. The storm continued until 9.30 a. m.
 of the 24th. Heavy losses in sheep and cattle are reported
 from many ranches.

Salt Lake City, Utah, 23d.—A severe snow storm began on
 the 22d. In the valleys the snow melted rapidly, but it formed
 heavy drifts in the railroad cuttings in the mountains.

Denver, Colorado, 23d.—The snow storm in the mountains
 continues with unabated severity. All trains are delayed.
 All available snow-plows were used to prevent a serious
 blockade.

LARGEST MONTHLY SNOWFALLS.

[Expressed in inches.]

The following are the largest monthly snowfalls reported
 from the various states and territories during the month:

California.—Cisco, 35; Summit, 34; Tehachapi, 16; Emi-
 grant Gap, 14; Alta, 10.5; Colfax, 4.

Colorado.—Pike's Peak, 16.8; Fort Garland, 6; Fort Lewis,
 4.3.

Connecticut.—Bethel, 6; Southington, 4.

Dakota.—Alexandria, 11.3; Fort Meade, about 7; Morris-
 ton, 4.5; Wicklow, 3.75.

Illinois.—Polo, 3; Riley, 3.

Maine.—Gardiner, 5.5; Dexter, 4.5; Cornish, 4.

Massachusetts.—Fall River, 8; Somerset, 4.4; Rowe, 4.

Michigan.—Northport, 5.3; Ionia, 5.25; Otisville, 3.5;
 Swartz Creek, 3.5; Lansing, 3.25.

Nebraska.—Fort Niobrara, 9.

New Hampshire.—Mount Washington, about 35; Wood-
 stock, about 9; Wolfborough, about 6; Grafton, 5.5; Belmont,
 5.4; Antrim, 4.2; Ashland, 4; Lake Village, about 4; Weir's
 Bridge, 3.

Nevada.—Otego, 22.25; Truckee, 21; Wells, 12; Toano,
 11; Boca, 9; Tecoma, 6; Halleck, 3.

New York.—Friendship, 6.5.

Pennsylvania.—Grampian Hills, 9; Wellsborough, 3.6; Dy-
 berry, 3.

Utah.—Nephi, 13.6; Salt Lake City, about 8.